Sec. Sec 275. Appointment of officers and employees. (a) Establishment. (b) Assessment. 275a. Service charges. 275b. Charges for activities performed for other (c) Reports. agencies. (d) Authorized activities. 275c. Cost recovery authority. (e) Manufacturing Extension Program. 276.Ownership of facilities. 278h. Research program on security of computer 277 Regulations. systems. Visiting Committee on Advanced Technology. 278 (a) Establishment. (a) Establishment; appointment; mem-(b) Fellowships. bership and composition; review and (c) Awards; applications. recommendations. (d) Program operation. (b) Qualifications; recommendations for (e) Review of program. appointment. (f) Definitions. (c) Terms of office; eligibility. 278i. Reports to Congress. (d) Meetings; quorum; notice. 278j. Studies by National Research Council. (e) Appointment by Committee of execu-278k. Regional Centers for the Transfer of Manufactive and other committees. turing Technology. (f) Chairman; Vice Chairman. (a) Creation and support of Centers; af-(g) Professional and clerical staff. filiations; merit review in determin-(h) Annual and other reports to Secing awards; objectives. retary and Congress. (b) Activities of Centers. Repealed. 278a. (c) Duration and amount of support; pro-278b. Working Capital Fund. gram descriptions; applications; (a) Utilization. merit review: evaluations of assist-(b) Availability of Fund. ance; applicability of patent law. (c) Reimbursements. (d) Acceptance of funds from other Fed-(d) Credits.
(e) "Cost" defined. eral departments and agencies. 2781. Assistance to State technology programs. (f) Distribution of earnings; restoration 278m Non-energy inventions program. of prior impairment. 278n. Advanced Technology Program. 278c Acquisition of land for field sites. (a) Establishment; purpose; focus; guid-278d. Construction and improvement of buildings ance. and facilities. (b) Authority of Secretary; research and 278e Functions and activities. development; contracts and cooper-278f. Fire Research Center. ative agreements; Federal labora-(a) Establishment; programs of research; tories; other activities with joint functions of Secretary; disseminaventures. tion of information. (c) Authority of Secretary; selection cri-(b) Authorization of appropriations. teria; monitoring use of tech-278g. International activities. nologies; overseas transfer; annual (a) Financial assistance to foreign nareport to Congress; financial reporttionals. ing and auditing; routine consider-(b) Foreign assistance and compensation ation of Committee advice; dissemito Institute employees. nation of research results. (c) Prohibition on use of appropriations (d) Contracts or awards; criteria; restricinapplicable. tions. (d) Recruitment and employment of resi-(e) Suspension for failure to satisfy eligident aliens. bility criteria. 278g-1. Research fellowships and other financial as-Coordination with other Federal techsistance to students at institutes of higher nology programs. education. (g) Meetings with industry sources. 278g-2. Post-doctoral fellowship program. (h) Standards development. 278g-2a. Teacher science and technology enhancement (i) Acceptance of funds from other Fed-Institute program. eral departments and agencies. (a) Establishment. (j) Definitions. (b) Areas of focus. 2780.User fees. (c) Procedures and selection criteria. Notice to Congress. 278p. (d) Scheduling. (a) Notice of reprogramming. (e) Means of accomplishing goals. (b) Notice of reorganization. Computer standards program. 278g-3. 278q. Appropriations; availability. (a) In general. 279. Absence of Director. (b) Minimum requirements for standards 280. 281. Repealed. and guidelines. Structural failures. 281a. Development of standards and guide-282. Repealed. lines. 282a Assessment of emerging technologies requir-(d) Information security functions. ing research in metrology. (e) Definitions. 283 to 286. Repealed or Omitted. 278g-4. Information Security and Privacy Advisory Board. § 271. Findings and purposes (a) Establishment and composition. (b) Duties. (a) The Congress finds and declares the follow-(c) Term of office. ing: (d) Quorum. (1) The future well-being of the United (e) Allowance for travel expenses. (f) Meetings.

(g) Staff services and utilization of Fed-

eral personnel.

Enterprise integration initiative.

(h) Definitions.

278g-5

- - States economy depends on a strong manufacturing base and requires continual improvements in manufacturing technology, quality control, and techniques for ensuring product reliability and cost-effectiveness.

- (2) Precise measurements, calibrations, and standards help United States industry and manufacturing concerns compete strongly in world markets
- (3) Improvements in manufacturing and product technology depend on fundamental scientific and engineering research to develop (A) the precise and accurate measurement methods and measurement standards needed to improve quality and reliability, and (B) new technological processes by which such improved methods may be used in practice to improve manufacturing and to assist industry to transfer important laboratory discoveries into commercial products.
- (4) Scientific progress, public safety, and product compatibility and standardization also depend on the development of precise measurement methods, standards, and related basic technologies.
- (5) The National Bureau of Standards since its establishment has served as the Federal focal point in developing basic measurement standards and related technologies, has taken a lead role in stimulating cooperative work among private industrial organizations in efforts to surmount technological hurdles, and otherwise has been responsible for assisting in the improvement of industrial technology.
- (6) The Federal Government should maintain a national science, engineering, and technology laboratory which provides measurement methods, standards, and associated technologies and which aids United States companies in using new technologies to improve products and manufacturing processes.
- (7) Such national laboratory also should serve industry, trade associations, State technology programs, labor organizations, professional societies, and educational institutions by disseminating information on new basic technologies including automated manufacturing processes.

(b) It is the purpose of this chapter—

- (1) to rename the National Bureau of Standards as the National Institute of Standards and Technology and to modernize and restructure that agency to augment its unique ability to enhance the competitiveness of American industry while maintaining its traditional function as lead national laboratory for providing the measurements, calibrations, and quality assurance techniques which underpin United States commerce, technological progress, improved product reliability and manufacturing processes, and public safety;
- (2) to assist private sector initiatives to capitalize on advanced technology;
- (3) to advance, through cooperative efforts among industries, universities, and government laboratories, promising research and development projects, which can be optimized by the private sector for commercial and industrial applications; and
- (4) to promote shared risks, accelerated development, and pooling of skills which will be necessary to strengthen America's manufacturing industries.

(Mar. 3, 1901, ch. 872, §1, 31 Stat. 1449; Pub. L. 100-418, title V, §5111, Aug. 23, 1988, 102 Stat. 1427.)

REFERENCES IN TEXT

This chapter, referred to in subsec. (b), was in the original "this Act" meaning act Mar. 3, 1901, ch. 872, 31 Stat. 1449, as amended, known as the National Institute of Standards and Technology Act, which is classified generally to this chapter. For complete classification of this Act to the Code, see Short Title note below and Tables.

AMENDMENTS

1988—Pub. L. 100-418 amended section generally. Prior to amendment, section read as follows: "The Office of Standard Weights and Measures shall be known as the National Bureau of Standards."

CHANGE OF NAME; NATIONAL BUREAU OF STANDARDS REDESIGNATED NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

Section 5115(c) of Pub. L. 100-418 provided that: "References in any other Federal law to the National Bureau of Standards shall be deemed to refer to the National Institute of Standards and Technology."

Act Mar. 4, 1913, ch. 141, §1, 37 Stat. 736, created the Department of Labor and renamed the Department of Commerce and Labor as the Department of Commerce.

SHORT TITLE OF 1998 AMENDMENT

Pub. L. 105–309, §1, Oct. 30, 1998, 112 Stat. 2935, provided that: "This Act [enacting sections 278g–2a, 278p, and 1511e of this title, amending sections 278k, 3704, and 3711a of this title, enacting provisions set out as notes under sections 272 and 3711 of this title, and amending provisions set out as a note under this section] may be cited as the 'Technology Administration Act of 1998'."

SHORT TITLE OF 1992 AMENDMENT

Pub. L. 102–245, title II, §201(a), Feb. 14, 1992, 106 Stat. 15, provided that: "This title [amending sections 272 and 278n of this title and enacting provisions set out as notes under section 278n of this title] may be cited as the 'Emerging Technologies and Advanced Technology Program Amendments Act of 1991'."

SHORT TITLE OF 1988 AMENDMENT

Section 5101 of Pub. L. 100–418 provided that: "This part [part I (§§ 5101–5164) of subtitle B of title V of Pub. L. 100–418, enacting sections 205j–1, 278i to 2780, 282a, 1532, 1533, 3704a, and 4632 of this title, amending this section, sections 205a, 205b, 205k, 272 to 275, 278, 278b, 278d, 278e, 278g to 278g–4, 3703, 3706, 3708, 3710, 3710c, and 3713 of this title, and section 5315 of Title 5, Government Organization and Employees, repealing sections 280 to 282 of this title, enacting provisions set out as notes under this section, sections 272, 272, 2781, and 278n of this title, and section 1803 of Title 30, Mineral Lands and Mining, and amending provisions set out as a note under this section] may be cited as the 'Technology Competitiveness Act'.'

SHORT TITLE

Act Mar. 3, 1901, ch. 872, §32, formerly §23, as added Jan. 8, 1988, Pub. L. 100–235, §3(3), 101 Stat. 1728; renumbered §31 and amended Pub. L. 100–418, title V, §§5114(1), 5115(a)(2), Aug. 23, 1988, 102 Stat. 1432, 1433; renumbered §32, Pub. L. 105–309, §4(a), Oct. 30, 1998, 112 Stat. 2935, provided that: "This Act [enacting this chapter] may be cited as the National Institute of Standards and Technology Act."

[Another section 32 of act Mar. 3, 1901, ch. 872, is classified to section 278q of this title.]

SAVINGS PROVISION

Act Mar. 3, 1901, ch. 872, §29, as added Aug. 23, 1988, Pub. L. 100-418, title V, §5161, 102 Stat. 1449, provided that: "All rules and regulations, determinations, standards, contracts, certifications, authorizations, delegations, results and findings of investigations, or other actions duly issued, made, or taken by or pursuant to

this Act [enacting this chapter], or under the authority of any other statutes which resulted in the assignment of functions or activities to the Secretary, the Department, the Director, or the Institute, as are in effect immediately before the date of enactment of this section [Aug. 23, 1988], and not suspended by the Secretary, the Director, the Institute or the courts, shall continue in full force and effect after the date of enactment of this section until modified or rescinded."

§ 272. Establishment, functions, and activities

(a) Establishment of National Institute of Standards and Technology

There is established within the Department of Commerce a science, engineering, technology, and measurement laboratory to be known as the National Institute of Standards and Technology (hereafter in this chapter referred to as the "Institute").

(b) Functions of Secretary and Institute

The Secretary of Commerce (hereafter in this chapter referred to as the "Secretary") acting through the Director of the Institute (hereafter in this chapter referred to as the "Director") and, if appropriate, through other officials, is authorized to take all actions necessary and appropriate to accomplish the purposes of this chapter, including the following functions of the Institute—

- (1) to assist industry in the development of technology and procedures needed to improve quality, to modernize manufacturing processes, to ensure product reliability, manufacturability, functionality, and cost-effectiveness, and to facilitate the more rapid commercialization, especially by small- and medium-sized companies throughout the United States, of products based on new scientific discoveries in fields such as automation, electronics, advanced materials, biotechnology, and optical technologies:
- (2) to develop, maintain, and retain custody of the national standards of measurement, and provide the means and methods for making measurements consistent with those standards:
- (3) to compare standards used in scientific investigations, engineering, manufacturing, commerce, industry, and educational institutions with the standards adopted or recognized by the Federal Government and to coordinate the use by Federal agencies of private sector standards, emphasizing where possible the use of standards developed by private, consensus organizations:
- (4) to enter into contracts, including cooperative research and development arrangements, in furtherance of the purposes of this chapter;
- (5) to provide United States industry, Government, and educational institutions with a national clearinghouse of current information, techniques, and advice for the achievement of higher quality and productivity based on current domestic and international scientific and technical development;
- (6) to assist industry in the development of measurements, measurement methods, and basic measurement technology;
- (7) to determine, compile, evaluate, and disseminate physical constants and the properties and performance of conventional and

advanced materials when they are important to science, engineering, manufacturing, education, commerce, and industry and are not available with sufficient accuracy elsewhere:

(8) to develop a fundamental basis and methods for testing materials, mechanisms, structures, equipment, and systems, including those used by the Federal Government;

(9) to assure the compatibility of United States national measurement standards with those of other nations;

(10) to cooperate with other departments and agencies of the Federal Government, with industry, with State and local governments, with the governments of other nations and international organizations, and with private organizations in establishing standard practices, codes, specifications, and voluntary consensus standards;

(11) to advise government and industry on scientific and technical problems:

(12) to invent, develop, and (when appropriate) promote transfer to the private sector of measurement devices to serve special national needs; and

(13) to coordinate Federal, State, and local technical standards activities and conformity assessment activities, with private sector technical standards activities and conformity assessment activities, with the goal of eliminating unnecessary duplication and complexity in the development and promulgation of conformity assessment requirements and measures.

(c) Implementation activities

In carrying out the functions specified in subsection (b) of this section, the Secretary, acting through the Director and, if appropriate, through other appropriate officials, may, among other things—

- (1) construct physical standards;
- (2) test, calibrate, and certify standards and standard measuring apparatus;
- (3) study and improve instruments, measurement methods, and industrial process control and quality assurance techniques:
- (4) cooperate with the States in securing uniformity in weights and measures laws and methods of inspection;
- (5) cooperate with foreign scientific and technical institutions to understand technological developments in other countries better;

(6) prepare, certify, and sell standard reference materials for use in ensuring the accuracy of chemical analyses and measurements of physical and other properties of materials;

(7) in furtherance of the purposes of this chapter, accept research associates, cash donations, and donated equipment from industry, and also engage with industry in research to develop new basic and generic technologies for traditional and new products and for improved production and manufacturing;

(8) study and develop fundamental scientific understanding and improved measurement, analysis, synthesis, processing, and fabrication methods for chemical substances and compounds, ferrous and nonferrous metals, and all traditional and advanced materials, including processes of degradation;